

AMENDMENTS TO THE CLAIMS

1-33. (CANCELED)

34. (PREVIOUSLY PRESENTED) A lithographic ink for use in a lithographic printing process onto a polymer substrate, the ink comprising a metal or carbon particulate material suspended in a mixture of a resin, an antioxidant, and an organic solvent, wherein the resin comprises a polyamide.

35. (CANCELED)

36. (PREVIOUSLY PRESENTED) The lithographic ink of claim 34 wherein the ink is printed on a substrate with at least one electrically conducting layer situated thereon.

37. (PREVIOUSLY PRESENTED) The lithographic ink of claim 34 wherein the ink is printed on a substrate with at least two or more stacked electrically conducting layers situated thereon.

38. (PREVIOUSLY PRESENTED) The lithographic ink of claim 34 wherein the ink is printed on a substrate with a first electrically conducting layer deposited thereon by electroless deposition.

39. (PREVIOUSLY PRESENTED) The lithographic ink of claim 38 wherein an electrical component is attached to the first electrically conducting layer by means of a conductive polymer adhesive.

40. (PREVIOUSLY PRESENTED) The lithographic ink of claim 38 wherein a second electrically conducting layer is electroplated atop the first electrically conducting layer.

41. **(CURRENTLY AMENDED)** The lithographic ink of claim ~~38~~ 40 wherein an electrical component is attached to the first or second electrically conducting layer by a conductive polymer adhesive.
42. **(PREVIOUSLY PRESENTED)** The lithographic ink of claim 34 wherein the ink is printed on a flexible polymer sheet.
43. **(PREVIOUSLY PRESENTED)** The lithographic ink of claim 34 wherein:
- a. the ink is printed on a substrate, with the ink having a thickness of less than about 5 microns;
 - b. a first electrically conducting layer is situated atop the ink, with the electrically conducting layer having a thickness of less than about 4 microns.
44. **(PREVIOUSLY PRESENTED)** The lithographic ink of claim 43 wherein the substrate is a flexible polymer sheet.
45. **(PREVIOUSLY PRESENTED)** The lithographic ink of claim 44 wherein an electrical component is attached to the first electrically conducting layer by means of a conductive polymer adhesive.
46. **(PREVIOUSLY PRESENTED)** The lithographic ink of claim 44 further comprising a second electrically conducting layer electroplated atop the first electrically conducting layer.
47. **(PREVIOUSLY PRESENTED)** The lithographic ink of claim 46 wherein an electrical component is attached to the first or second electrically conducting layer by a conductive polymer adhesive.

48. (NEW) The lithographic ink of claim 34 wherein the metal or carbon particulate material constitutes 50%-90% of the weight of the ink.
49. (NEW) The lithographic ink of claim 34 wherein the ink is at least substantially free of water.
50. (NEW) A lithographic ink for use in a lithographic printing process, the ink comprising:
- a. a particulate material which constitutes 50%-90% of the weight of the ink, the particulate material including at least one of metal and carbon; and
 - b. a mixture wherein the particulate material is suspended, the mixture including:
 - (1) a polyamide resin,
 - (2) an antioxidant, and
 - (3) an organic solvent,wherein the mixture is at least substantially free of water.
51. (NEW) A substrate with a conductive layer thereon comprising:
- a. a polymer substrate,
 - b. an ink printed lithographically thereon, the ink including a metal or carbon particulate material suspended in a mixture of:
 - (1) a polyamide resin,
 - (2) an antioxidant, and
 - (3) an organic solvent; and
 - c. a first electrically conducting layer deposited on the ink.
52. (NEW) The substrate of claim 51 wherein an electrical component is attached to the first electrically conducting layer by means of a conductive polymer adhesive.

53. (NEW) The substrate of claim 51 wherein the polymer substrate is a flexible polymer sheet.
54. (NEW) The substrate of claim 51 wherein:
- a. the ink has a thickness of less than about 5 microns;
 - b. the first electrically conducting layer has a thickness of less than about 4 microns.